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 ACCESSION NUMBER: 2001032207 PCTFULL ED 20020820
 TITLE (ENGLISH): METHODS FOR CONFERRING ACTIVE/PASSIVE IMMUNOTHERAPY
 TITLE (FRENCH): PROCEDE PERMETTANT D'APPLIQUER UNE IMMUNOTHERAPIE
 ACTIVE/PASSIVE
 INVENTOR(S): COWAN, Fred, Manley
 PATENT ASSIGNEE(S): UNITED STATES ARMY MEDICAL RESEARCH AND MATERIEL
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DETD The concept of **ligand-hapten conjugations**
 for redirecting humoral immunity to lyse
 target cells has been previously tested in vitro (Circolo & Borsos,
 Lysis of hapten-labeled
 cells by. . . I3, 1861-2, 199 1). Lussow et al., (SangStat Medical
 Corp. Menlo Park CA) have recently shown that redirecting circulating
 antibodies via **ligand-**
hapten conjugates eliminates target cells in vivo
 (Lussow AR, Buelow R, Fanget L, Peretto S,
 Gao L, Pouletty P. Redirecting Circulating Antibodies via **Ligand**
-hapten Conjugates
 Eliminates Target Cells In vivo, J Immunother Emphasis Tumor Immunol,
 19, 257-65,
 1996).

to the hapten including the proliferation
 of antibodies to the hapten, and B) administering to the patient a
 sufficient amount of a

hapten-ligand conjugate wherein the ligand
 of the conjugate has at least one binding site to
 the target antigen and the hapten of the conjugate is available for
 binding with the antibodies
 such that the target antigen becomes **complexed** with the
hapten-ligand conjugate and with
 the antibodies to the extent that the target antigen undergoes
 neutralization by the immune
 cells of the patient.

activated immune cells having binding sites for the
 immunogen, and then, B) administering to the patient a sufficient
 amount
 of a **hapten-ligand**

conjugate wherein the ligand of the conjugate has at least one binding site to the target antigen and the hapten or immunogen. . .

antigen binding ligand conjugated to DNP would gain (humoral) antibody-mediated immunity. On the other hand, a subject administered a ligand-ABA-Tyr **conjugate** I I both **ligand-hapten** and **ligand-immunogen** achieves both humoral and cellular immunity to the target antigen.

ligand. The anti-ricin ABA are then conjugated to the chemical 13 hapten DNP (dinitrophenol). Rabbit anti-DNP antisera is commercially available. Standard U(complement) and **ADCC** (antibody dependent cellular cytotoxicity) assays and the passive cutaneous Arthus reaction are used as prototypic models for testing humoral chemical ligand-API.

the presence of mouse sera, heat inactivated mouse sera (56' C, 30 min) or splenic leukocytes to assay for complement and **ADCC** mediated lysis of SRBC (hemoglobin release). The optimum M [C] (molar concentration) of intact anti-ricin (Fc+) for lysis of

Ricin-SRBC

in the C' and **ADCC** assays serves as a guide for selection of M [C] of anti-ricin (Fab). If complement and **ADCC** mediated lysis of SRBC is by API. the lysis will be apparent in the (4) test sample and (5) positive control, and. . .

CLMEN. . . to said

hapten including the proliferation of antibodies to the hapten; and B) administering to the patient a sufficient amount of a **hapten** -**ligand**

conjugate

wherein said ligand of said conjugate has at least one binding site to said target antigen and said hapten of said conjugate. . .

of activated immune cells having binding sites for said immunogen. and then,

B) administering to said patient a sufficient amount of a **hapten**

-**ligand**

conjugate

wherein said ligand of said conjugate has at least one binding site to said target antigen and said hapten or immunogen of. . .

20 The method of claim 7, wherein said **hapten** of said

hapten-ligand conjugate is

dinitrophenyl. and said immunogen is L-tyrosine-p-azobenzenearsonate and wherein said

hapten is bound to said immunogen by a spacer molecule of from. . .